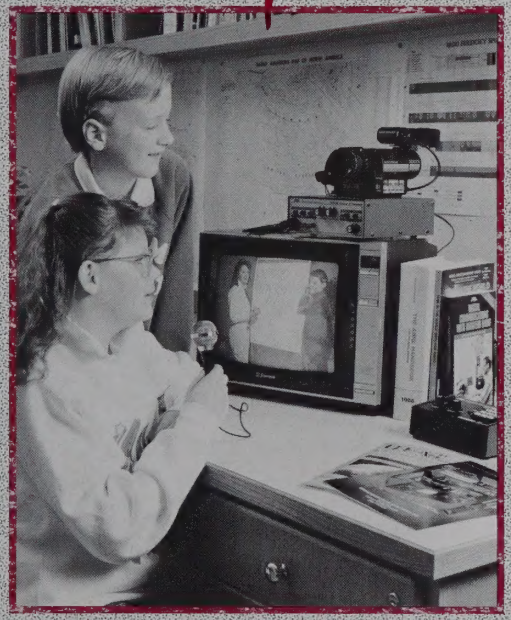
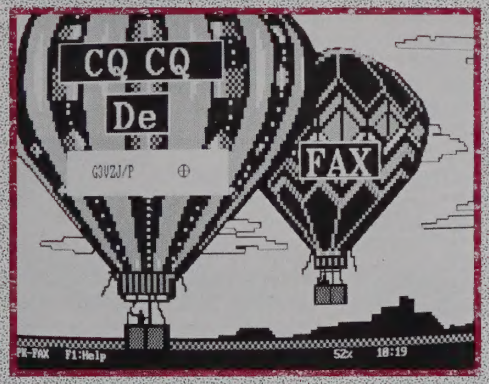
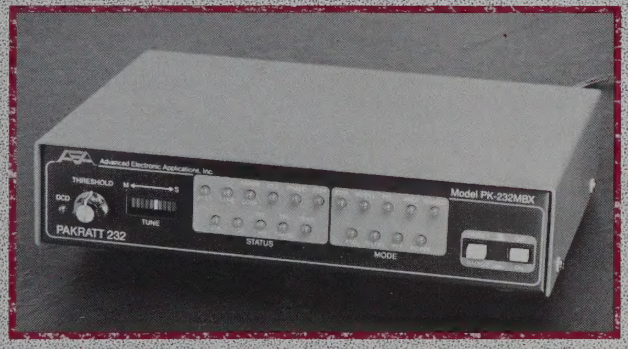
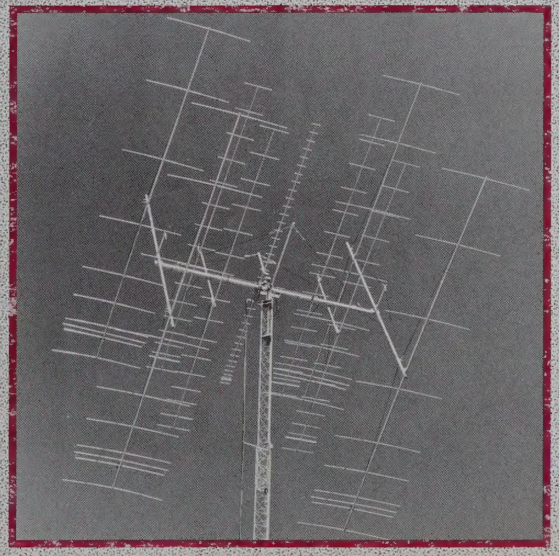
1990 Catalog









Advanced Electronic Applications, Inc.
2006-196th St. SW/P.O. Box 2160
Lynnwood, WA 98036

Multi-Mode

PK-232MBX
Multi-Mode Data Controller

With over 35,000 units sold worldwide, the PK-232MBX is the world's leading multi-mode data controller. Combining all amateur data communication modes in one comprehensive unit, the PK-232MBX offers Morse Code, Baudot, ASCII, AMTOR/SITOR 476 and 625, HF and VHF Packet, WEFAX receive and transmit, as well as commercial standard NAVTEX automated marine information services. The PK-232MBX provides any RS-232 compatible computer or terminal complete amateur digital operating capabilities. All decoding, signal processing and protocol software is on ROM in the PK-232MBX. Only a simple terminal program is required to interface the PK-232MBX to your computer. The PK-232MBX package includes an RS-232 interface cable that connects the unit directly to the RS-232 port of the computer.

The real strength of the PK-232MBX is its superior design. It's a no compromise data controller specifically designed for multi-mode operation, not just a packet controller with supplemental firmware. The PK-232MBX is a Z-80A based system and has hardware HDLC using the Zilog 8530 SCC. The internal modem of the PK-232MBX can transmit packet at rates from 45 to 1200 baud, with the option of using an external modem for higher baud rates up to 9600 baud. The PK-232MBX has a no compromise VHF/HF/CW modem with an eight-pole Chebyshev bandpass filter followed by a limiter-discriminator with automatic threshold correction. This modem can copy shifts from 85 to 1500 Hz in two ranges. Transmitter tones are low distortion sinewave phase continuous AFSK, Bell 202 standard (1200-2200 Hz) for VHF and 2110-2310 (compatible with 170 Hz shift for RTTY) for HF.

The PK-232MBX internal software includes special features such as SIAM™ (Signal Identification and Acquisition Mode). The PK-232MBX automatically identifies Baudot, ASCII, AMTOR/SITOR and TDM (Time Division Multiplex) signals, then measures signal speed and polarity. A simple "OK" command automatically switches the PK- 232MBX to the recognized mode and starts the data display.

PakMail™ mailbox with selective control of third-party traffic is now a standard feature. Your friends can now leave you messages around the clock. Your local full-service BBS can automatically forward your messages directly to

your PK-232MBX. You can even use the PK-232MBX with the popular WØRLI and WA7MBL packet bulletin board programs.

Only AEA provides the type of full-featured Host Mode preferred by many professional programmers for efficient control of the PK-232MBX (see chart on next page).

In packet, the PK-232MBX internal program is also compatible with the popular TCP/IP networking protocol. This requires the TNC to feature special commands, (KISS, PERSISTENCE, SLOTTIME) not found in all controllers.

Additional Features:

FAX Printing. Many parallel printers can be connected directly to the PK-232MBX or to your computer (with appropriate applications software) to print HF monitored FAX signals. The PK-232 supports Epson, IBM and other popular dot matrix graphics printing standards.

Easy and Efficient Operation. Twenty-one front panel indicators and a tuning indicator allow easy operation, with instant operating feedback.

Lithium Battery Backed RAM.

Adjustable Threshold Control.

Two Radio Ports. Interchangeable HF or VHF operation. Front panel pushbutton selectable.

External Modem Disconnect. Internal modem bypass for compatibility with higher speed modems.

Scope and FSK Outputs. A separate accessory port gives both mark and space scope outputs and permits connection to your HF radio's FSK input.

Upgradeable. The very first PK-232 is upgradeable to the latest version with plug-in ROMs and upgrade kits. The latest update released October 31, 1989, included a plug-in board and software EPROMs to provide PakMail™ mailbox with selectable third-party traffic, seven character AMTOR (CCIR R.625) call identity, TDM (Time Division Multiplex) receiving for SWL's and Prioritized Acknowledgement (ACK) protocol for improved packet performance.

Specifications

Modem Input Dynamic Range: 5 mV to 500 mV RMS

Demodulator: 8-pole bandpass filter, limiter, 4-pole discriminator, 5-pole post-detection low pass filter

Modulator: Phase continuous sinewave, AFSK generator

Modulator Output Level: 5-200 mV RMS

Packet Protocol: AX.25 L2V2 (previous versions supported)

Processor System: Zilog Z-80

RAM: Battery backed, 32 Kbytes

ROM: 64 Kbytes standard, 128 Kbytes maximum

Hardware HDLC: Zilog 8530 SCC

REAR PANEL INPUT/OUTPUT CONNECTIONS

Radio Interfaces: Two 5 pin, front panel selectable (receive audio, transmit audio, PTT, auxiliary squelch, ground)

External Modem: 5 pin: transmit data, receive data, carrier detect, ground, PTT

FSK Outputs: Normal and reverse

Scope Outputs: Mark, space

CW Keying Outputs: +100 VDC @ 200 mA max. and -25 V @ 30 mA max.

Terminal Interface: RS-232-C 25 pin DB-25 connector (pins 1-8 and 20 software and hardware handshake)

Terminal Data Rates: Autobaud settings at 300, 1200, 2400, 4800 and 9600. TBAUD adds 45, 50, 57, 75, 100, 110, 150, 200, 400, 600-BPS terminal rates

Printer Interface: Centronix parallel printer output with special cable

FRONT PANEL CONTROLS AND INDICATORS

Controls: Power, radio selector, threshold adjust

Indicators: Data carrier detect LED, 10 segment HF bargraph tuning indicator, mode indicators (Baudot, ASCII, PTT, Morse, Sel FEC, FEC, ARQ Mode L, AMTOR STBY), Status Indicators (STBY, Phase, Idle, Error, RQ, Tfc, Over)

PHYSICAL

Power Requirement: +12 to +16 VDC @ 700 mA

Dimensions: 11"(279mm)W x 8.25"(210mm)D x 2.5"(64mm)H

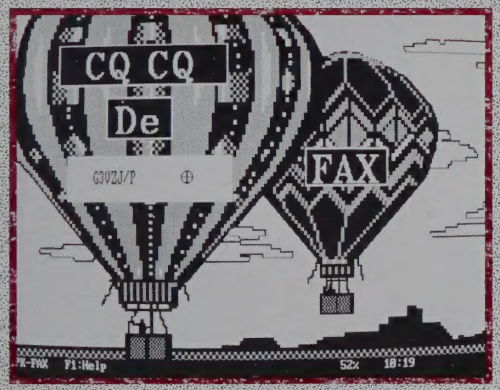
Weight: 3 lbs.(1.35kg)

Software Packet

PK-232MBX Software Selection Table

PC	Software	Data	FAX	Split Screen	Memories	Host Mode	Printer	Disk	Media	Cable	Overlays	PK-88
IBM	PC-Pakratt	yes	no	yes	yes	yes	yes	yes	D	no	no	yes
IBM	PK-FAX	no	yes	no	yes	yes	yes	yes	D	no	no	no
C-64	Com-Pakratt	yes	no	yes	yes	yes	yes	yes	R*	yes	yes	yes
C-64	Com-FAX	no	yes	no	yes	yes	yes	yes	R*	yes	yes	no
Mac	MacRatt	yes	yes	yes	yes	yes	yes	yes	D	no	no	yes

Key: D=Disk, R=Rom (*C-64 programs are in ROM only but support a disk drive.)



AVT image in process of being restored after heavy QRM transmission.

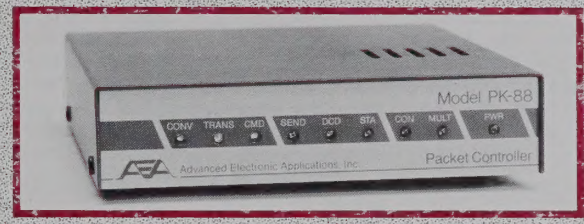
Amiga Video Terminal (AVT) System

The Amiga Video Terminal System is a revolutionary hardware/software package that enables the Amiga user to send and receive images over the telephone or a radio transceiver. Images are converted to a digitally synthesized analog format which takes advantage of the data bandwidth to provide full-color images on the computer screen in as little as 12 seconds. Modes are also available for detailed images taking as long as three minutes for a 320 by 400 transfer. The system also supports analog facsimile high resolution (1024 horizontal by 1200 vertical) 16 level grey-scale images.

Additional features include:

- On-screen tuning oscilloscope
- SSTV mode-to-mode conversion
- Five software selectable input ports
- Interference correction modes
- 55 SSTV modes
- Up to 4,096 simultaneous colors
- SSTV resolution up to 640 by 400 pixels
- GEOSFAX (with adapter), WEFAX, NEWSFAX
- SSTV auto mode detection
- 3D capability with user supplied LCD shutter goggles
- Compatible with Amiga 500, 1000, 2000 and Z500 computers with a minimum of one megabyte of RAM (1.5 Mbytes or more recommended)

PK-88 HF/VHF Packet TNC



Unique operating features with a proven hardware and software design make AEA's PK-88 your best choice in packet radio--now with MailDrop, an 8KByte efficient personal Mailbox. The PK-88 also allows multiple single frequency QSO's, digipeating and networking. It's a superb value, packed with all the most needed packet radio modem features such as direct interface capability with NET/ROM* and TCP/IP.

Specifications

MODEM

Modem Input Dynamic Range: 5 to 770 mV RMS
Demodulator: AMD 7910 World Chip with differential AM detection
Modulator: Phase-continuous sinewave, AFSK generator
Modulator Output Level: 5 to 300 mV RMS
Packet Protocol: AX.25 L2V2 (previous version supported)
Processor System: Zilog Z-80
RAM: Battery backed, 32 KBytes
ROM: 32 KBytes
Hardware HDLC: Zilog 8530 SCC

REAR PANEL INPUT/OUTPUT CONNECTIONS

Radio Interfaces: Locking 8 pin, (receive audio, transmit audio, PTT auxiliary squelch, ground)
External Modem: Transmit data, receive data, data carrier detect, clock, ground)
Terminal Interface: RS-232-C 25 pin DB-25 connector
Terminal Data Rates: Autobaud settings at 300, 1200, 2400, 4800 and 9600. TBAUD adds 45, 50, 57, 75, 100, 110, 150, 200, 400, 600, and 19,200 BPS terminal rates

FRONT PANEL INDICATORS

Indicators: Converse, transparent, command, send, data carrier detect, status, connect, multiple connect, power

PHYSICAL

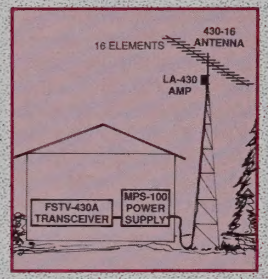
Power Requirement: +12 to +16 VDC @ 550 mA
Dimensions: 7.5"(191mm)W x 6"(152mm)D x 1.5"(38mm)H
Weight: 2.4 lbs.(1.1kg)

*NET/ROM is trademarked Software 2000

Amateur TV

AEA's New ATV System

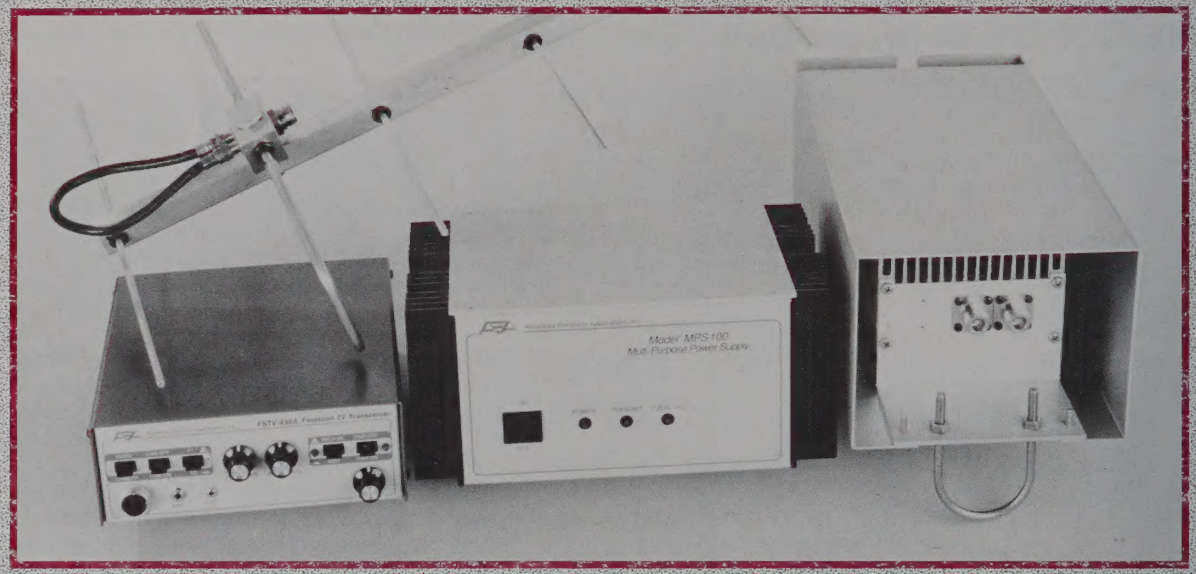
Add a new dimension to your amateur radio communications with AEA's Amateur Television (ATV) system. If you hold at least a technician-class license, you can transmit and receive live or taped audio and video Fast-Scan TV (FSTV) information that rivals broadcast quality. Now you can share more than conversation over the air with this new mode of "personal communications."



It's Easy and Inexpensive. If you have a video camera or camcorder and a standard TV set, you may already own the most expensive components of an ATV system. AEA's ATV system includes a transceiver and antenna. Simply connect the camera, TV and the antenna to the transceiver, and you're on the air LIVE with one watt P.E.P.! If you want to broadcast with more power, AEA also offers a 50 watt mast-mounted linear amplifier and GaAsFET preamp with power supply. Your TV set will monitor your transmitted and received pictures.

The FSTV-430A Transceiver features a low-noise UHF GaAsfet preamp with a typical system noise figure of less than 1.5dB and a crystal-controlled or variable tuning down converter. Output is available on channel 3 or 4 for signal reception AND monitoring transmissions. Two frequencies can be selected from the front panel for transmission (one crystal is included). The AEA design is also optimized for superior video and audio quality without sync buzz even with weak signals. The FSTV-430A is the only transceiver you need to work ATV and it also allows you to use the same TV set to monitor your transmitted and received pictures.

The LA-430/50 Amplifier with Power Supply gives a boost to your ATV signal. It includes a 50W P.E.P. mast-mounted Linear Amplifier (**patent pending**) covering 420 to 450 MHz and a GaAsFET preamp which utilize the antenna feedline for DC power. The mast-mount eliminates the line loss between the amplifier/preamplifier and the antenna to improve both transmission and reception, and is the equivalent of a 100W amplifier in the shack with a 3dB line loss. The amplifier is housed in a weather-resistant alodized aluminum case. The MPS-100 power supply also provides a 13.6 volt output for the FSTV-430A.



The 430-16 Antenna is a high-performance, computer-optimized yagi specifically designed for ATV operation. It features broadband frequency coverage from 420 to 440 MHz, 14.3dB gain, O-ring sealed connectors, 28 degree E plane and 32 degree H plane beam width and 16 elements on a 10-foot boom.

What are the advantages of Vestigial Sideband (VSB)? The FSTV- 430 incorporates a VSB design which minimizes adjacent channel interference since it occupies less bandwidth than double sideband designs...it's the only ATV unit on the market that uses this superior design. VSB is similar to SSB whereby it puts ALL of the audio power and most of the video in one sideband instead of two which means it will not interfere with government repeaters or wipe out adjacent channels. Even with the AEA LA-430/50 amplifier, the image sideband is reduced more than 30dB. VSB is used by professional broadcasters and presents an obvious advantage to the quality-conscious amateur.

Specifications (Typical)

TRANSMITTER

Frequency Range: 420 to 440 MHz

Operational Frequencies: 434 MHz supplied; 421.25 MHz, 426.25 MHz and 439.25 MHz optional

Power Output: 1 watt P.E.P. on sync peaks

Modulation: Vestigial sideband video, FM audio

Intermodulation Distortion: Less than -42 dBc

Harmonic: Less than -40 dBc

Power Requirement: 13.6 ±0.5 VDC,, 1.5 A plus camera current

RECEIVER

Conversion gain: More than 25 dB

Noise Figure: Less than 1.5 dB

Power Requirement: 13.6 ±0.5 VDC

Impedance: 50 ohms nominal

PHYSICAL

Front Panel Controls: Video/camera, camera on/off, F1/F2, receive/transmit, power on/off, video gain, audio gain, Rx tune, camera 10-pin connector, microphone and PTT input jacks

Rear Panel Connectors: Power, antenna and TV coax connectors, audio in and video in jacks

Dimensions: 7.4"(188mm)W x 8.3"(211mm)D x 2.6"(66mm)H

Weight: 2 .2lbs.(.99kg)

Antennas

M²/AEA Antennas

The superior engineering designs, quality and high performance that AEA built its reputation on are now avilable in its dynamic line of antennas. Developed and manufactured by Mike Staal, K6MYC, president of M² Enterprises and co-founder of KLM antennas, the product line includes an assortment of 2-meter, 6-meter, 10-meter and 440 MHz and antennas and accessories for fixed or portable applications.

The primary advantages of AEA's antennas are computer optimization for the the highest gain for boom-length available and heavy-duty construction. Other features include machined aluminum driven element housing with built-in "N" connector and O-ring seals including access cover, silicone dielectric gel in the cavities to withstand inclement weather and flexible boom-to-mast mounting for mechanical balance. Mix and match for the ideal multiple antenna array!

To complement the antenna line, AEA also offers various "H" frame support packages, the MT-3000 heavy-duty elevation mechanism/ controller and welded aluminum power dividers for coupling multiple antennas.

MODEL	ELEM	GAIN	BOOM	WT	WL	F/B
10M-7	7	10.5	45'	49/58	7.4	25
6M-5	5	9.4	15'9"	11/14	2.0	12
6M-2WL	9	12.4	39'6"	31/40	5.0	25
6M-2.5WL	11	13.0	50'4"	38/47	5.9	22
2M-5WL	17	15.0	33'	13/15	2.7	22
2M-18XXX	18	15.3	36'	14/16	2.9	25
2M-6WLHD	20	16.0	41'4"	30/37	6.1	22
2M-CP14	14	10.0	9'10"	6/8	1.1	20
2M-CP22	22	12.1	18'	12.5/15	2.5	20
2M-5/ 440-10XP	5/10	9.0/12.0	59.375" 57.962"	5.5/7.0	1.1	15/25
EB-144	N/A	1.0	N/A	1.5/3	N/A	N/A
430-16	16	14.3	10'	4/5	N/A	20
432-13WL	39	18.0	30'3"	12/13	2.5	22
EB-432	N/A	1.0	N/A	1.3/3	N/A	N/A

ELEM-elements, **GAIN**-dBd, gain over a dipole. **BOOM**-length, feet and inches. **WT**-weight in pounds, antenna weight/shipping weight. **WL**-wind load in square feet. **F/B**-front-to-back ratio, dB. **10M**-ten meters. **6M**-six meters. **2M**-two meters. **WL**-wavelength. **HD**-heavy-duty. **CP**-circularly polarized. **EB**-eggbeater. **XP**-cross polarized.

6-meter and 2-meter moon-bounce installation. Four 6M-2WL, four 2M-5WL and one 432-13WL antennas in array on self-supporting 89-foot US tower at N7ML.

6M-2WL installation at K6RFK

430-16 Yagi

IsoPole™ Omni-Directional VHF and UHF Base Station Antennas

An outstanding mechanical and electrical design make the IsoPole the best choice for an economical omni-directional VHF or UHF base station antenna. All IsoPole antennas yield the maximum gain attainable for their respective lengths and a zero degree angle of radiation which puts the most signal on the horizon. Exceptional decoupling results in simple tuning and a significant reduction in TVI potential. Decoupling cones offer great efficiency over obsolete radials which radiate in the horizontal plane. The IsoPoles also have a broader frequency coverage than any comparable antennas. Typical SWR is 1.4 to 1 or better across the entire band!

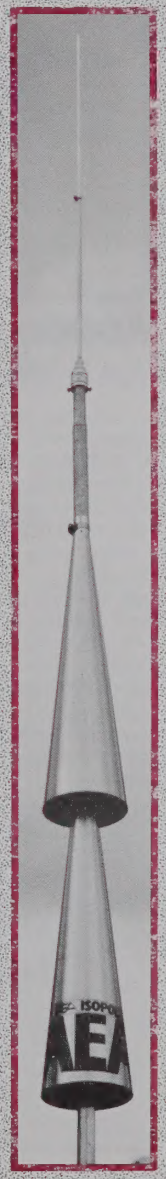
All mounting hardware is stainless steel. The decoupling cones and radiating elements are made of corrosion-resistant aluminum alloys. Aerodynamic cones are the only appreciable wind load and are attached directly to the support (a standard TV mast, not supplied).

IsoPoles are ideal for packet radio. The decoupling cones stop computer hash picked up by the outer shield of the coaxial cable from being passed to the receiver.

Specifications

Model	144	220	440
Frequency Coverage:	135-160 MHz	210-230 MHz	415-465 MHz
Impedance:	50 ohms	50 ohms	50 ohms
2.1 VSWR Bandwidth:	10 MHz @146 MHz	15 MHz @220 MHz	22 MHz @435 MHz
Power Rating:	1.0 kW	1.0 kW	1.0 kW
Radiating Element Length:	125.5"(3.2m)	79.25"(2m)	46"(1.2m)
Wind Area:	< 1 ft^2	< .75 ft^2	< 0.2 ft^2
Maximum Mast OD:	1.25"(32mm)	1.25"(32mm)	1.25"(32mm)
Min. Mast Length*:	8.0'(2.4m)	5.25'(1.6m)	6"(50mm)
Coax Connector:	PL-259	PL-259	Type N

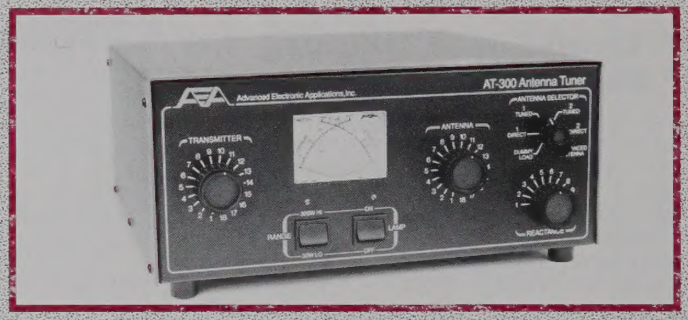
*Mast not included.



Contact M² Enterprises for further information at (209) 432-8873

Antenna Tuners

Keyers



AT-300 and AT-3000 Antenna Tuners

For tuning perfection, choose AEA's AT-300 300 watt or AT-3000 3 kW antenna tuners. Quality and exceptional engineering are built-in for maximum performance and long operating life.

The low-pass design provides more harmonic attenuation for lower TVI and allows matching to a much wider range of antenna impedances than common high-pass designs.

While some manufacturers promote the small size of their tuners, AEA knows that smaller size degrades the inductor's Q (quality factor), which results in less efficiency. Lower efficiency results in less RF energy reaching your antenna.

The AEA tuners feature a frequency compensated dual-movement SWR meter for ease of tuning with a front panel power range switch. Minimal SWR is achieved by inductors with 18 (AT-300) and 20 (AT-3000) taps created by AEA's exclusive patent pending CAM switch design for accurate tuning. The built-in front panel antenna switch allows you to easily select two unbalanced (coax-fed) antennas, a dummy load or a balanced antenna.

Specifications (Typical)

RF Power:	300 watts (AT-300); 3,000 watts (AT-3000), continuous
Frequency Range:	3.5 to 30 MHz
Transmitter /Antenna Tuning:	18 (AT-300); 20 (AT-3000) positions
Reactance:	Continuous
Antenna Selector:	6-positions: antenna 1 tuned and tuner bypass, antenna 2 tuned and tuner bypass, dummy load (external) and balanced antenna
Power Switch:	High and low (AT-3000 also has medium)
Lamp:	Light control for meter (12V DC or AC powered)
Dimensions:	AT-300, 12.8"(325mm)W x 15"(325mm)D x 5.8"(147mm)H; AT-3000, 15"(325mm)W x 14.2"(361mm)D x 6.75"(171mm)H
Weight:	AT-300, 8.14lbs.(3.7kg); AT-3000, 10.3lbs.(4.7kg)

The Morse Machine MM-3 Keyer

The Morse Machine has all the features you need in a memory keyer, including two to 99 WPM speed selection and over 8,000 characters of memory that can be stored in 20 memories. The memories are soft partitioned so that your messages can be as short or as long as you like. Memory can be expanded to 36,000 characters. All memory is backed up by an internal lithium battery.

Comprehensive Morse training facilities are built-in:

A Proficiency Trainer allows random code group practice with steadily increasing speed.

A Random Word Generator generates four-letter words for a more realistic practice session.

A QSO Simulator allows you to call stations, answer a CQ or sit back and listen to realistic QSO's very much like those on the air.

The MM-3 also features automatic serial number insertion and incrementing in any memory message. Use the front panel knob to adjust your sending speed or enter a precise speed with the keypad, toggling between the two at any time. Exchanges can be expedited by having parts of your message sent at a higher speed. You can even add remote switches for four of the memories to send your response or call CQ. The MM-3 can also be programmed to be an automatic beacon to repeat a message at programmed intervals.

The keypad offers an intuitive easy-to-use method of quickly changing parameters to customize the MM-3 to meet your specific needs.

Specifications (Typical)

Speed Range:	2 to 99 WPM
Memory:	8,192 bytes (approx. 8,400 characters)
Memory Option:	32,768 bytes (approx. 36,000 characters)
Keying Output:	+50 V, 500 mA max.; -35 V, 20 mA max.
Computer I/O:	150-9600 baud, RS-232 compatible
Serial Numbers:	1 to 9,999
Beacon Interval Range:	1 to 999 seconds
Increase Speed Time:	0.1 to 59.9 minutes
Dot, Dash Memory On/Off:	Program selectable
Dot-Space Ratio:	Programmable from 0.5 to 1.5
Dash-Space Ratio:	Programmable from 2.0 to 4.0
Semi-Automatic (Bug) Mode:	Program selectable
Power Requirement:	9 to 16 VDC at 200 mA
Dimensions:	7.4"(188mm)W x 4.75"(120mm)D x 1.9"(48mm)H
Weight:	1.4 lbs.(0.63 kg)

6M & 10M Handies

Accessories

DX Handies

Now you can enjoy DX operation on six and ten meters with AEA's battery powered SSB/CW handhelds. Carry them with you to monitor the bands or for portable DX'ing.

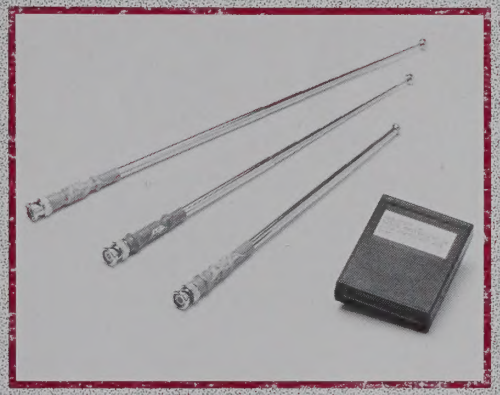
Two variable crystal oscillators with 50 kHz range can be selected from the top panel. Crystals for 28.250 to 28.300 and 28.300 to 28.350 MHz are included with the ten meter DX Handy. The six meter version includes crystals for 50.1 to 50.15 and 50.25 to 50.3 MHz. Additional optional crystals are available.

CW operation is possible with the built-in pushbutton or with an external key or keyer. The DX Handies also feature a built-in mic and speaker, an S-meter/output power meter and an effective noise blanker. A telescoping antenna is included.

Specifications

GENERAL	
Frequency Coverage:	10M Version: Any 50 kHz segment 28.0 to 29.0 MHz 6M Version: Any 50 kHz segment 50.1 to 50.3 MHz
Frequency Control:	VXO provides 50 kHz of continuous tuning with a single crystal
Frequency Stability:	±500 Hz from a cold start
Power Requirement:	8.4 to 9.4 VDC. Six AA dry cells (1.5V/cell) included for 9.0 VDC, seven AA optional Nicads (1.2V/cell) for 9.4 VDC
Current Drain:	Rx appx. 70 mA, Tx appx. 620 mA
TRANSMITTER	
Output Power:	10M 2W at 9.0 VDC, 6M 1W at 9.0 VDC
Emission Modes:	A3J (USB) and A1(CW)
Spurious Emissions:	Better than -40dBc
RECEIVER	
Sensitivity:	Less than 0.5 uV for 15 dB S/N
Intermediate Frequency:	11.2735 MHz
PHYSICAL	
Dimensions:	2.6"(66mm)W x 1.5"(39mm)D x 5.6"(142mm)H
Weight:	3.2 lbs. (710g) with batteries and antenna

LIMITED STOCK.



Hot Rods™

AEA's high performance telescoping handheld antennas provide maximum gain and extended range. The HR-1 2M 1/2-wave, HR-2 220 MHz and HR-4 440 MHz easily handle over 25 watts of power, making them excellent emergency base or mobile antennas.

MU-64 Morse University

The Morse University program and a Commodore 64 computer can make learning Morse code easier than you ever imagined. The MU-64 ROM cartridge simply plugs directly into the computer and does not require a disk drive. Learn individual characters and numbers. Increase your speed with random characters in groups. You can even use your new skills to play the built-in video game, the Receiving Game.

AC-1/AC-4 Power Adapters

AEA's 12 VDC wall adapters, the AC-1 and AC-4 are suitable power supplies for all AEA products requiring 12 VDC at 600 mA or less current. The AC-4 provides one amp of output and is ideal for use with the PK-232MBX.

DC-1 Cigarette Lighter Cord

The DC-1 is a fused cable with a standard cigarette lighter plug for 12V operation.

World Clock

AEA's world clock features dual digital displays so you can see the local time and any of 24 selected time zones side-by-side. Move the slide bar to select the city/zone you want, and the display automatically changes to the proper time and date. The world clock also features an alarm, light button and compact size. Perfect for the station or for travelling. A folding easel stand and a travel pouch are included.

Books

Also available is AEA's "Digital Communications with Amateur Radio" book and PK-232 Technical Reference Manual.

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